

# PUBLIC WORKS AND TRANSPORTATION

## Solid Waste Services

<b>PROGRAM:</b> Commercial Recycling	<b>PROGRAM ELEMENT:</b>
---	-------------------------

**PROGRAM MISSION:**  
To provide comprehensive technical support, assistance, outreach, and training to all businesses in the County and to monitor businesses for compliance with Executive Regulation 109-92 in order to improve the environment by diverting waste from disposal through recycling, waste reduction, reuse, and "buying recycled" opportunities

**COMMUNITY OUTCOMES SUPPORTED:**

- Improved environment
- Enhanced quality of life
- Healthy children and adults
- High quality services meeting or exceeding the expectations of County businesses

PROGRAM MEASURES	FY01 ACTUAL	FY02 ACTUAL	FY03 ACTUAL	FY04 BUDGET	FY05 CE REC <sup>1</sup>
<b>Outcomes/Results:</b>					
Number of businesses discovered not recycling during initial site visit by program specialist	NA	NA	493	500	560
Number of businesses recycling in compliance with Executive Regulation 109-92 after initial site visit (or, if necessary, after issuance of first Notice of Violation) <sup>a</sup>	NA	NA	8,807	9,470	9,944
Percentage of businesses recycling after initial site visit/first Notice of Violation	NA	NA	94.7	94.7	88.5
<b>Service Quality:</b>					
Percentage of businesses complying with annual report requirements <sup>b</sup>	19.4	95.9	100.0	100.0	100.0
Percentage of businesses served during the fiscal year <sup>c</sup>	20.9	24.1	27.1	29.0	32.6
Percentage of survey respondents rating site visit as excellent or good	NA	NA	NA	>90	>90
<b>Efficiency:</b>					
Average cost per business served (\$)	162	112	102	96	105
Businesses visited per workyear	1,278	1,353	1,431	1,538	1,367
<b>Workload/Outputs:</b>					
Number of businesses visited by program specialists/investigators <sup>k</sup>	5,751	8,256	9,300	10,000	<sup>1</sup> 11,232
Total audience reached <sup>d</sup>	33,592	19,777	26,442	12,000	65,232
Total number of services provided <sup>e</sup>	19,766	21,805	12,996	20,420	25,560
Number of businesses filing initial recycling and waste reduction plans <sup>f</sup>	NA	NA	NA	NA	6,000
Number of Annual Reports received covering previous calendar year <sup>g</sup>	126	327	458	650	650
Number of educational events held or participated in <sup>h</sup>	14	45	77	80	80
<b>Inputs:</b>					
Expenditures (\$000)	934	926	948	963	1,185
Workyears <sup>i</sup>	4.5	6.1	6.5	6.5	8.2

**Notes:**

<sup>a</sup>Businesses that are judged not in compliance with Executive Regulation 109-92 during the initial site visit by the program specialist are given 30 days to set up a recycling program. Upon a second visit, businesses that remain out of compliance are issued a written warning (Notice of Violation) and a certain period (usually 14 days) to remedy the situation. These businesses are re-inspected after the specified period to determine if they have come into compliance. This measure includes all businesses found to be in compliance during the initial site visit or that come into compliance within the period provided by the Notice of Violation.

<sup>b</sup>Based on the estimated number of medium and large-sized businesses (according to the Dunn and Bradstreet business database) which are required to file annual recycling and waste reduction reports.

<sup>c</sup>Based on the estimated number of businesses operating in the County, according to the Dunn and Bradstreet business database (FY01 = 27,500; FY02 and FY03 = 34,311; FY04 and FY05 = 34,453).

<sup>d</sup>Total businesses and individuals reached via special events, mailings, on-site visits, and telephone calls.

<sup>e</sup>Services provided to a business include materials distributed such as brochures, labels for recycling containers, posters, recycling starter kits, etc.

<sup>f</sup>Businesses are required to file a one-time business recycling and waste reduction plan when they start operations. Plans will not be requested from new businesses during FY04 in anticipation of amending Executive Regulation 109-92.

<sup>g</sup>Property management companies/owners file reports that cover multiple businesses in a single report. For example, in FY03 approximately 650 businesses were covered in 458 reports.

<sup>h</sup>Includes seminars, training sessions, and outreach events conducted by various organizations and communities where program staff provided technical assistance and information on recycling, waste reduction, and "buying recycled."

<sup>i</sup>Workyears are budgeted, not actual.

<sup>j</sup>The FY05 budget includes additional resources to provide direct notification to the estimated 25,000-30,000 businesses, owners, managers, employees, property management companies, chambers of commerce, and other professional associations of their recycling requirements under the amendment to Executive Regulation 109-92, plus the creation of two Investigator I positions to provide full-time, dedicated investigation and enforcement of Executive Regulation 109-92 as it pertains to businesses and organizations in the County.

<sup>k</sup>As of FY05, includes businesses visited by Investigators or by Program Specialists.

<sup>1</sup>An estimated 1,232 additional site visits will be conducted by the Investigator I positions in FY05 pursuant to Executive Regulation 109-92 as amended. This estimate is based on the average number of complaints received per year and the expectation that 10% of businesses visited by program specialists will not be in compliance.

**EXPLANATION:**

This program provides on-site technical and educational services to the County's 25,000 - 30,000 businesses. Although the County does not provide recycling collection services for the non-residential sector, the County requires (through Executive Regulation 109-92) that businesses recycle certain materials. Program Specialists spend at least 80% of their daily activities visiting businesses and meeting with managers, property management companies, and employees to help establish - or provide recommendations for improving - recycling and waste reduction programs. When the program is fully staffed with 5 specialists, it is expected that 10,000 sites can be visited in a year. (Prior to FY03, the program was not fully staffed.)

Executive Regulation 109-92 was enacted in March 1993. While it has served the County well for the past ten years, Solid Waste Services has identified a number of ambiguities in the regulation that businesses are trying to use to avoid implementing recycling programs. As a result, the Division plans to amend Executive Regulation 109-92 during the FY04-05 timeframe.

**Number of Businesses Visited per Workyear**

Fiscal Year	Number of Businesses Visited
01 ACT	1,278
02 ACT	1,353
03 ACT	1,431
04 BUD	1,538
05 REC	1,367

**PROGRAM PARTNERS IN SUPPORT OF OUTCOMES:** Business owners, managers and employees; property owners; property management companies; collection contractors; recycling markets; condominium property boards; tenant associations; custodial contractors; trade organizations; Chambers of Commerce.

**MAJOR RELATED PLANS AND GUIDELINES:** Executive Regulation 109-92, Montgomery County Code Chapters 48 and 56, 10-Year Comprehensive Solid Waste Management Plan, Montgomery County Policy on Waste Reduction.

# PUBLIC WORKS AND TRANSPORTATION

## Solid Waste Services

<b>PROGRAM:</b> Recycling - Residential	<b>PROGRAM ELEMENT:</b>
--	-------------------------

### PROGRAM MISSION:

To provide reliable, easy-to-use curbside collection of recyclable materials from all non-municipal single-family households in order to improve the environment by diverting waste from disposal

### COMMUNITY OUTCOMES SUPPORTED:

- Improved environment
- Enhanced quality of life
- Healthy children and adults
- High quality services meeting or exceeding the expectations of County residents

### PROGRAM MEASURES

	FY01 ACTUAL	FY02 ACTUAL	FY03 ACTUAL	FY04 BUDGET	FY05 CE REC
<b>Outcomes/Results:</b>					
Single-family recycling rate (%) <sup>a</sup>	52.9	53.6	53.6	54.3	52.6
<b>Service Quality:</b>					
Number of missed collection complaints <sup>b</sup>	6,924	6,557	8,260	6,500	8,500
Number of other customer complaints <sup>b</sup>	685	510	653	550	800
Missed collection complaints per 1,000 households served	34.9	32.8	40.8	31.8	41.3
<b>Efficiency:</b>					
Average cost per household served (\$)	47.47	48.18	50.98	62.25	80.29
Households served per workyear	13,226	14,199	11,432	11,094	11,096
<b>Workload/Outputs:</b>					
Number of households served (non-municipal) <sup>c</sup>	198,383	200,206	202,411	204,129	205,587
Number of service requests	40,570	43,710	39,886	43,000	57,750
Number of calls for information <sup>b</sup>	9,276	12,567	28,446	10,600	31,900
<b>Inputs:</b>					
Program expenditures (\$000) <sup>d</sup>	9,417	9,647	10,318	12,707	16,507
Workyears	15.0	14.1	17.7	18.4	20.4

### Notes:

<sup>a</sup>The recycling rate is computed as the percentage recycled by weight. The single-family recycling rate reported here includes both municipal and non-municipal single-family households.

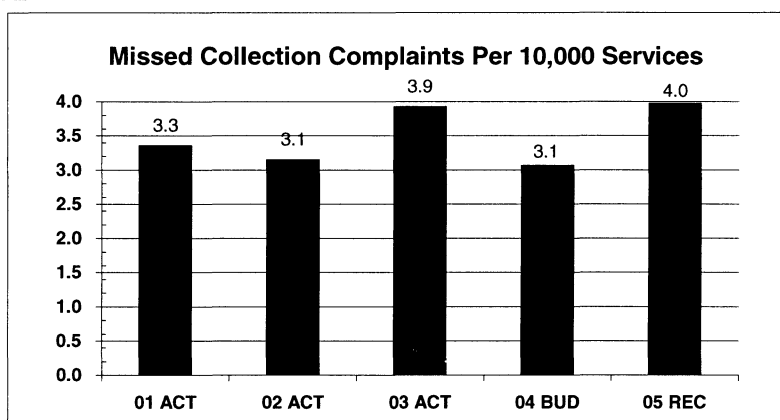
<sup>b</sup>All information on calls is based on the Division's "OSCAR" computerized call-tracking system and does not include visits to the Website, which provides extensive information. In FY01, there were significant increases in Web visitors and e-mail questions.

<sup>c</sup>Based on the billing database at the middle of the fiscal year.

<sup>d</sup>Expenditures include only direct costs for the County Recycling Collection Program; other budgetary programs affecting recycling are not included, nor are indirect costs paid by the Solid Waste Fund. The FY05 expenditures do not include a savings of \$188,718 in other programs due to reduced refuse.

### EXPLANATION:

This program encompasses the collection of recyclables from non-municipal single-family households, including multi-family buildings with six or fewer dwelling units. The increase in the complaint rate in FY03 reflects the difficulties that collection companies had retaining experienced employees and performance problems experienced with several contractors. Those performance problems have been corrected. In FY04, new collection contracts will have just begun in 7 of 13 collection areas, and by the end of FY05, all areas will have new contracts. If the request for additional large rolling carts is approved, there are likely to be some added misses.



**PROGRAM PARTNERS IN SUPPORT OF OUTCOMES:** Collection contractors, single-family residents, recycling facility operator, recycling markets.

**MAJOR RELATED PLANS AND GUIDELINES:** Comprehensive Solid Waste Management Plan.

# PUBLIC WORKS AND TRANSPORTATION

## Solid Waste Services

<b>PROGRAM:</b> Refuse Collection - Residential	<b>PROGRAM ELEMENT:</b>
--	-------------------------

**PROGRAM MISSION:**  
To provide reliable, convenient curbside residential collection in designated areas of the County while achieving a high degree of customer satisfaction

**COMMUNITY OUTCOMES SUPPORTED:**

- Improved environment
- Enhanced quality of life
- Healthy children and adults

PROGRAM MEASURES	FY01 ACTUAL	FY02 ACTUAL	FY03 ACTUAL	FY04 BUDGET	FY05 CE REC
<b>Outcomes/Results:</b>					
<b>Service Quality:</b>					
Number of missed collection complaints	1,627	1,686	3,245	1,750	3,135
Number of other customer complaints <sup>a</sup>	686	507	652	560	650
Complaints per 1,000 households served	8.2	6.0	7.7	6.6	7.6
<b>Efficiency:</b>					
Average cost per household served (\$)	60.29	60.03	63.02	64.97	62.78
Average cost per ton collected (\$) <sup>b</sup>	66.77	68.74	67.75	75.15	73.73
<b>Workload/Outputs:</b>					
Number of households served <sup>c</sup>	83,508	84,788	85,085	84,940	85,192
Tons of refuse collected <sup>d</sup>	75,404	74,044	79,153	73,425	72,531
Number of service requests	23,667	23,492	26,529	24,150	24,300
Number of calls for information	9,732	10,118	9,482	10,650	9,650
<b>Inputs:</b>					
Expenditures (\$000) <sup>e</sup>	5,035	5,090	5,362	5,518	5,348
Workyears <sup>f</sup>	12.9	12.3	11.9	12.1	11.4

**Notes:**

<sup>a</sup>Data are from the Division's "OSCAR" computerized call-tracking system and do not include visits to the Website, which provides extensive information.

<sup>b</sup>The average cost per ton collected increased in FY02 due to greater recycling (resulting in less refuse being set out for disposal). The contracted unit prices per home do not vary with the actual weight of refuse set out.

<sup>c</sup>Based on the billing database at the middle of the fiscal year.

<sup>d</sup>County refuse contract collection trucks only, per in-bound County truck scales records. Does not include resident self-hauled waste or bulky pickups, and is not adjusted as in prior versions of this display for non-processibles (construction and demolition materials). The FY03 increase may be due to wet weather.

<sup>e</sup>Total operating expenses for the Collection Fund (see Schedule F2 in the County Comprehensive Financial Statement for actuals). Does not include indirect costs charged to the Fund (approximately \$100,000 per year). Accounting is on a GAAP (accrual) basis and typically does not differ significantly from an expenditure (cash) basis. Most expenses are for private collection contracts.

<sup>f</sup>Workyears correspond to the total workyears budgeted for all Collection Fund programs, including administration and contract monitoring.

**EXPLANATION:**

This program consists of refuse collection services provided by the County to single-family households in the areas designated for County refuse collection (primarily in the southern third of the County). Collection is performed by private haulers under contract to the County. The increase in FY03 reflects the difficulties that collection companies have had in retaining experienced employees and performance problems experienced with several contractors. Those performance problems have been corrected.

Fiscal Year	Complaints per 10,000 Services
01 ACT	1.6
02 ACT	1.1
03 ACT	1.5
04 BUD	1.3
05 REC	1.5

**PROGRAM PARTNERS IN SUPPORT OF OUTCOMES:** Collection contractors, single-family residents.

**MAJOR RELATED PLANS AND GUIDELINES:** Comprehensive Solid Waste Management Plan.

# PUBLIC WORKS AND TRANSPORTATION

## Solid Waste Services

**PROGRAM:**  
Resource Recovery Facility

**PROGRAM ELEMENT:**

**PROGRAM MISSION:**

To reduce the amount of material that must be disposed by landfilling, maximize the recycling of ferrous materials<sup>a</sup> remaining in the waste after other ferrous reduction and recycling efforts, and recover the useful energy content of this renewable energy resource in an environmentally sound and cost-effective manner, while minimizing truck traffic associated with waste hauling

**COMMUNITY OUTCOMES SUPPORTED:**

- Provide high-value services
- Protect and enhance the environment
- Improve the quality of life for citizens

**PROGRAM MEASURES**

	FY01 ACTUAL	FY02 ACTUAL	FY03 ACTUAL	FY04 BUDGET	FY05 CE REC
<b>Outcomes/Results:</b>					
Percentage reduction in processable waste <sup>b</sup> landfilled <sup>c</sup>	77.7	70.5	71.2	70.5	70.5
Value of electricity sold (\$000)	7,756	12,578	14,152	10,688	12,923
Truck trips removed from County roads due to rail link	22,957	25,709	27,809	24,894	28,178
<b>Service Quality:</b>					
Processable waste bypassed and disposed elsewhere (tons) <sup>d</sup>	0	0	0	0	0
Percentage of operating time the Resource Recovery Facility (RRF) is in compliance with permits <sup>e</sup>	100	100	100	100	100
<b>Efficiency:</b>					
Average net operating cost per ton (\$)	27.91	23.82	21.09	27.80	25.19
Average net debt service cost per ton (\$) <sup>f</sup>	56.59	51.09	45.30	48.01	42.66
Net energy recovery rate (kilowatt hours sold per ton processed)	572	579	593	575	575
<b>Workload/Outputs:</b>					
Waste processed at the Resource Recovery Facility (tons) <sup>g</sup>	516,536	578,450	625,710	560,121	634,000
Ferrous materials recovered or recycled at the RRF (tons)	14,908	16,447	19,649	15,683	17,752
Other metals recovered from ash (tons)	1,190	0	0	0	0
Electricity generated (megawatt hours)	352,679	391,853	368,987	329,911	373,426
<b>Inputs:</b>					
Total contract cost to County (\$000) <sup>h</sup>	43,645	43,334	41,544	42,463	43,017
Workyears (County employees)	1.8	2.1	3.0	2.8	2.9

**Notes:**

<sup>a</sup>Ferrous materials are substances that contain iron.

<sup>b</sup>"Processable waste" consists of all types of solid waste except construction and demolition debris - concrete, rock, rebar, etc.

<sup>c</sup>Percentage reduction in *weight*. The reduction in the use of landfill *volume* is 10 -15% greater (e.g. 80 to 95%) due to the high density of ash.

<sup>d</sup>If processable waste cannot be handled by the Resource Recovery Facility (e.g. because of capacity limitation), it would be disposed of out-of-County through an existing long-term contract.

<sup>e</sup>The facility was not in compliance due to air emissions for 3 hours during FY02.

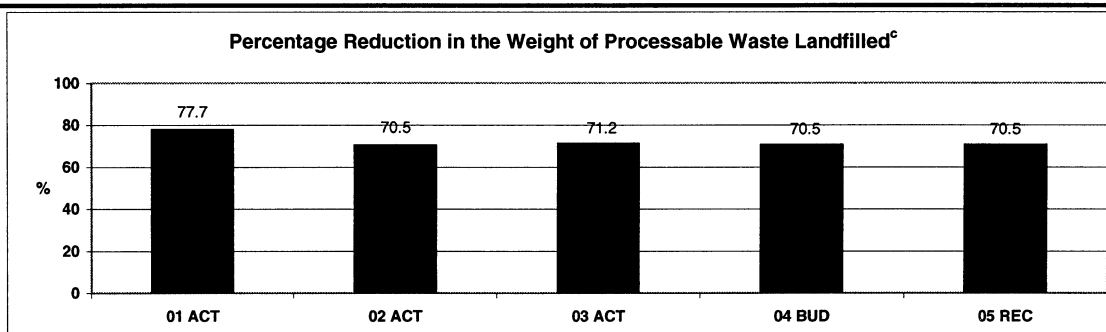
<sup>f</sup>County contract costs covering net debt service of the Resource Recovery Facility and transfer station improvements (built and operated by the Northeast Maryland Waste Disposal Authority). Debt service ends 4/1/16. Does not include nonfinanced capital (\$2.09 million in FY04, \$862,000 in FY05), non-contract operating costs (\$772,000 in FY05, mostly for risk management), or the cost of the County workyears shown (\$275,134 in FY05).

<sup>g</sup>Tons actually processed (differs from the weight when loaded on rail from the transfer station). Does not include non-processable tonnage (60,000 tons in FY04).

<sup>h</sup>Total County contract costs for the program. Includes transfer station operation for disposal waste and rail link as well as Resource Recovery Facility operation and insurance. Does not include residue disposal (about \$10.80 per input ton), risk management costs, non-debt financed capital outlay, chargebacks to the Department of Environmental Protection for laboratory services (\$43,603 in FY05 for 0.37 workyears and lab costs), and certain other administrative and indirect County costs (see footnote f, above).

**EXPLANATION:**

This graph shows the weight reduction (in tons) that must be landfilled after transferring to, and processing at, the Resource Recovery Facility as a percentage of the tons of processable waste delivered to the County transfer station. Landfill volume savings are greater. See also notes (b) and (c) above.



**PROGRAM PARTNERS IN SUPPORT OF OUTCOMES:** Montgomery County Department of Environmental Protection, Northeast Maryland Waste Disposal Authority, Covanta Energy, CSX, American Ash Recycling of Pennsylvania (in FY01).

**MAJOR RELATED PLANS AND GUIDELINES:** Bond Indenture, Solid Waste Management Plan, Waste Disposal Agreement, Service Agreement, Electricity Sales Agreement, Rail Transportation Agreement.

# PUBLIC WORKS AND TRANSPORTATION

## Solid Waste Services

**PROGRAM:**

Vacuum Leaf Collection

**PROGRAM ELEMENT:**
**PROGRAM MISSION:**

To ensure the efficient collection and recycling of seasonal leaf fall in the area of the County designated for County leaf collection by vacuum truck

**COMMUNITY OUTCOMES SUPPORTED:**

- Improved environment
- Safe streets
- Convenient, high quality service meeting or exceeding the expectations of County residents

**PROGRAM MEASURES**

	FY01 ACTUAL	FY02 ACTUAL	FY03 ACTUAL	FY04 BUDGET	FY05 CE REC
<b>Outcomes/Results:</b>					
Tons of leaves delivered and composted <sup>a</sup>	13,555	17,509	28,014	17,785	18,698
<b>Service Quality:</b>					
Households requesting to be added (or deleted) from the program	0	0	0	0	0
<b>Efficiency:</b>					
Tons of leaves composted per workyear	301	329	500	365	356
Average cost per ton composted (\$) <sup>b</sup>	264	250	200	208	238
Truck cubic yards of leaves collected per workyear	2,953	3,040	3,119	3,372	3,076
Average cost per household served (\$)	30	37	48	31	37
<b>Workload/Outputs:</b>					
Households served	118,336	117,527	117,616	119,379	118,948
Truck cubic yards of leaves collected	132,871	161,663	174,688	164,211	161,494
<b>Inputs:</b>					
Expenditures (\$000) <sup>b</sup>	3,577	4,382	5,609	3,702	4,450
Workyears <sup>c</sup>	45.0	53.2	56.0	48.7	52.5

**Notes:**

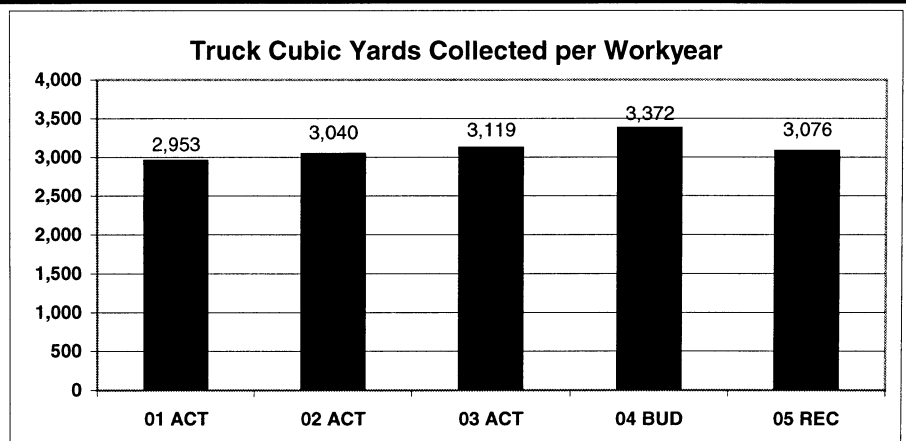
<sup>a</sup>All years include approximately 500 tons of leaves from municipalities. FY03 tonnage is high due to unusual rain and snow.

<sup>b</sup>Expenditures include charges from the Highway Maintenance Section, plus an allocated cost for composting the leaves at the County's Yard Trim Composting Facility (the latter is treated as an interfund transfer beginning in FY04). Total costs are therefore influenced by purchases of equipment at the composting facility. Indirect costs and certain administrative and other related costs are not included. The increases in FY03 were affected by weather.

<sup>c</sup>Workyears include both permanent and temporary positions in the Highway Maintenance Section. Figures reported for FY01 are budgeted, not actual. The FY02 Actual workyears do not include leave charged to the program.

**EXPLANATION:**

Under the County's Leaf Vacuuming Program, leaves are vacuumed from curbsides in the designated Leaf Vacuuming District - roughly the lower third of the County. The work is seasonal and is performed by both permanent and temporary staff provided by the Highway Maintenance Section. Both the cubic yards collected and annual tonnage are influenced by weather. FY03 was a highly unusual year in precipitation and the occurrence of freezing conditions during the normal collection period, resulting in very wet loads and extended collection periods. All leaves vacuumed were composted.



**PROGRAM PARTNERS IN SUPPORT OF OUTCOMES:** Highway Maintenance Section, Yard Trim Composting Facility operating contractor, area residents.

**MAJOR RELATED PLANS AND GUIDELINES:** Comprehensive Solid Waste Management Plan.